

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,351	03/29/2000	Katherine H. Guo	554-224 (Guo 3-3-2-22-2	6141
46363	7590 08/26/2005		EXAMINER	
•	ATTERSON & SHERI CHNOLOGIES, INC	ENGLAND, DAVID E		
595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702			ART UNIT	PAPER NUMBER
			2143	
			DATE MAILED: 08/26/2003	5

Please find below and/or attached an Office communication concerning this application or proceeding.

 	App	lication No.	Applicant(s)		
	09/5	538,351	GUO ET AL.		
Office Action Sumn	2004	niner	Art Unit		
	Davi	d E. England	2143		
The MAILING DATE of this of eriod for Reply	communication appears o	on the cover sheet w	ith the correspondence address		
A SHORTENED STATUTORY PETHE MAILING DATE OF THIS COEXENSIONS of time may be available under the after SIX (6) MONTHS from the mailing date of the period for reply specified above is less the If NO period for reply is specified above, the new Failure to reply within the set or extended perion and reply received by the Office later than three armed patent term adjustment. See 37 CFR	DMMUNICATION. e provisions of 37 CFR 1.136(a). In of this communication. nan thirty (30) days, a reply within the naximum statutory period will apply od for reply will, by statute, cause to ee months after the mailing date of	no event, however, may a r he statutory minimum of thir and will expire SIX (6) MON he application to become AE	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
tatus					
1) Responsive to communication	on(s) filed on <u>01 June 20</u>	<u>005</u> .			
2a) ☐ This action is FINAL .	2b)⊠ This action	n is non-final.			
3) Since this application is in conclused in accordance with the		•	ers, prosecution as to the merits is 0. 11, 453 O.G. 213.		
Disposition of Claims					
4) ⊠ Claim(s) <u>1 and 5-8</u> is/are pe 4a) Of the above claim(s) 5) □ Claim(s) is/are allowe 6) ⊠ Claim(s) <u>1 and 5-8</u> is/are rej 7) □ Claim(s) is/are object 8) □ Claim(s) are subject	is/are withdrawn from ed. ected. ed to.				
		•			
Application Papers	to by the Everiner				
9) The specification is objected 10) The drawing(s) filed on	•	or h) Dobiected to	by the Examiner		
Applicant may not request that		-			
•			(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is ob	•				
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a) All b) Some * c) No		ty under 35 U.S.C. §	§ 119(a)-(d) or (f).		
1. Certified copies of the	priority documents have	e been received.			
· ·					
,	•		received in this National Stage		
• •	nternational Bureau (PC)	• • •	raceived		
* See the attached detailed Off	ice action for a list of the	certified copies flot	receiveu.		
Attachment(s)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Information Disclosure Statement(s) (PTO	·	Paper No(5) Notice of I	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)		
Paper No(s)/Mail Date S. Patent and Trademark Office		6)			
TOL-326 (Rev. 1-04)	Office Action St	ummary	Part of Paper No./Mail Date 20050819		

Application/Control Number: 09/538,351 Page 2

Art Unit: 2143

DETAILED ACTION

1. Claims 1 and 5 - 8 are presented for examination.

Claim Objections

- 2. Claims 1, 5 8 are objected to because of the following informalities: In claims 1 and 5, the limitation of "Helpful Server (HS)" is not stated in the specification. What is stated is a "Helper Server (HS)". Applicant is asked to amend this minor oversight so the claim language can reflect on the specification.
- 3. Claims 6 8 are objected for their dependency on claim 5.
- 4. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyal (6484199) in view of Hunter et al. (6647417) (hereinafter Hunter).

Art Unit: 2143

7. As per claim 1, as closely interpreted by the Examiner, Eyal teaches a method for caching streaming multimedia (SM), comprising:

- 8. calculating, at a content server that is hosting a plurality of SM objects, a server hotness rating for each SM object, said content server being connected to a plurality of helpful server (HSs) in a network, each server hotness rating being a sum of helper hotness ratings over said HSs, each helper hotness rating being a local measure of client demand for each SM object, (e.g. col. 12, lines 37 67 & col. 30, line 13 col. 31, line 63);
- 9. categorizing each SM object into one of a plurality of server hotness categories based on calculated server hotness rating, (e.g. col. 12, lines 37 67 & col. 30, line 13 col. 31, line 63); and
- pushing, from said content server to all HSs, said HSs caching each SM object for distribution to a plurality of clients, (e.g. col. 12, lines 37 67 & col. 30, line 13 col. 31, line 63), but does not specifically teach pushing, from said content server to all HSs, a fraction of each SM object, each fraction being determined according to said server hotness category, said HSs caching said fractions of each SM object for distribution to a plurality of clients.
- Hunter teaches pushing, from said content server to all HSs, a fraction of each SM object, each fraction being determined according to said server hotness category, said HSs caching said fractions of each SM object for distribution to a plurality of clients, (e.g., Fig. 2 "Previewing" & col. 8, lines 20 63 & col. 9, lines 25 65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Hunter with Eyal because rating media data to the specification of a group of clients give the ability to transmit only a preview of the media if the client does not wish to listen or view all of the media which would use less

Application/Control Number: 09/538,351 Page 4

Art Unit: 2143

bandwidth to only play a preview of the media, unless the client request, by rating, the media more often or wishes to download the media, then the bandwidth would then be fully utilized for said full download.

- 12. Claims 5 and 6 are rejected for similar reasons as stated above.
- 13. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyal and Hunter as applied to claim 5 above, and in further view of Saxena et al. (5805821) (hereinafter Saxena).
- 14. As per claim 7, as closely interpreted by the Examiner, Eyal and Hunter do not specifically teach a deterministic cache placement and replacement policy is implemented at the HSs. Saxena teaches a deterministic cache placement and replacement policy is implemented at the HSs, (e.g., col. 23, lines 1 33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Saxena with the combine system of Eyal and Hunter because an important element of video delivery is that the data stream be delivered isochronously, that is without breaks and interruptions that a viewer or user would find objectionable.
- 15. As per claim 8, as closely interpreted by the Examiner, Eyal and Hunter do not specifically teach a random cache placement and replacement policy is implemented at the HSs. Saxena teaches a random cache placement and replacement policy is implemented at the HSs.

Art Unit: 2143

(e.g., col. 23, lines 1-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Saxena with the combine system of Eyal and Hunter because of similar reasons stated above.

Response to Arguments

16. Applicant's arguments with respect to claims 1, 5 - 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 18. a. Verbiest et al. U.S. Patent No. 5550577 discloses Video on demand network, including a central video server and distributed video servers with random access read/write memories.
- 19. b. Hosken U.S. Patent No. 6438579 discloses Automated content and collaboration-based system and methods for determining and providing content recommendations.
- 20. c. Crinon U.S. Patent No. 6331859 discloses Video skimming system utilizing the vector rank filter.

Application/Control Number: 09/538,351

Art Unit: 2143

Page 6

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England Examiner Art Unit 2143

De //

DAVID WILEY SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100